

This circular will be sent regularly to all who apply for it.

## United States Department of Agriculture,

WASHINGTON, D. C., November 29, 1916.

### MONTHLY LIST OF PUBLICATIONS.

[NOVEMBER, 1916.]

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#### READ CAREFULLY BEFORE ORDERING.

A copy of any of the publications listed herein, except those otherwise noted, may be obtained free upon application to the Editor and Chief of the Division of Publications, United States Department of Agriculture, Washington, D. C., as long as the department's supply lasts.

After this department's supply is exhausted, publications can still be obtained from the Superintendent of Documents, Government Printing Office, Washington, D. C., but by purchase only, and at the prices noted herein.

Send all remittances to the Superintendent of Documents direct. His office is not a part of the Department of Agriculture.

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#### SPECIAL NOTICE.

Before mailing your request be sure and see that your name and complete post-office address (street number or rural route number as the case may be) is attached.

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#### FARMERS' BULLETINS—FOR FREE DISTRIBUTION.

~~NOTE.~~—The department's supply of the current numbers of Farmers' Bulletins is ordinarily sufficient to make it possible to send them free to all applicants. They are also for sale at 5 cents per copy.

**The Fall Army Worm or "Grass Worm" and Its Control.** By W. R. Walton and Philip Luginbill, Entomological Assistants, Cereal and Forage Insect Investigations. 1p. 16, figs. 13. Contribution from the Bureau of Entomology. November, 1916. (*Farmers' Bulletin 752.*)

For general distribution.

**Commercial Handling, Grading, and Marketing of Potatoes.** By C. T. More, Investigator in Market Grades and Standards, and C. R. Dorland, Assistant in Market Grades and Standards. 1p. 40, figs. 19. Contribution from the Office of Markets and Rural Organization. Nov. 1, 1916. (*Farmers' Bulletin 753.*)

Should be of interest to all growers of potatoes and especially to commercial growers and shippers of the United States who are interested in the most desirable methods used in the handling and marketing of the crop.

**Orchard Barkbeetles and Pinhole Borers, and How to Control Them.** By Fred. E. Brooks, Entomological Assistant, Deciduous Fruit Insect Investigations. 1p. 16, figs. 18. Contribution from the Bureau of Entomology. Nov. 29, 1916. (*Farmers' Bulletin 763.*)

Is of interest to fruit growers generally, especially in the territory east of the Rocky Mountains.

**The Common Cabbage Worm.** By F. H. Chittenden, Entomologist in Charge of Truck-Crop and Stored-Product Insect Investigations. 1p. 16, figs. 10. Contribution from the Bureau of Entomology. Nov. 20, 1916. (*Farmers' Bulletin 766.*)

Is intended to assist cabbage growers to control one of their most troublesome pests.

**Dwarf Broom Corns.** By Benton E. Rothgeb, Scientific Assistant in Grain-Sorghum and Broom-Corn Investigations. 1p. 16, figs. 7. Contribution from the Bureau of Plant Industry. Nov. 18, 1916. (*Farmers' Bulletin 768.*)

Of especial interest to farmers in the southern section of the Great Plains area.

**Losses from Selling Cotton in the Seed.** By Charles F. Creswell, Scientific Assistant. 1p. 8. Contribution from the Office of Markets and Rural Organization. Nov. 10, 1916. (*Farmers' Bulletin 775.*)

This bulletin should be of interest to cotton producers, ginners, and buyers generally.

## DEPARTMENT BULLETINS.—TECHNICAL.

The publications listed below are technical or scientific treatises or bulletins applying to a special industry or locality. The edition is limited, but they will be furnished free to persons who can use such specialized information as long as the supply lasts. However, to insure prompt receipt, remit price to the Superintendent of Documents.

**The Flow of Water in Wood-Stave Pipe.** By Fred. C. Scobey, Irrigation Engineer, with discussion by Gardner S. Williams, Theron A. Noble, D. C. Henny, E. A. Moritz, E. W. Schoder, L. M. Hoskins. Pp. 96, pls. 14, figs. 7. Contribution from the Office of Public Roads and Rural Engineering. (Professional Paper.) Nov. 25, 1916. (**Department Bulletin 376.**) Price, 25 cents.

This bulletin treats of the subject of flowing water in wood-stave pipes. It is based on field tests made on pipes in commercial operation. New formulas are developed that more accurately fit all known data than any others now used. This publication is offered for use of engineers designing and measuring wood-stave pipes for irrigation, power, municipal, mining, or other purposes and for courts and attorneys at law interested in cases involving the carrying capacities of wood-stave pipes.

**A Survey of Typical Cooperative Stores in the United States.** By J. A. Bexell, Dean, School of Commerce, Oregon Agricultural College; Hector Macpherson, Director, Bureau of Markets, Oregon Agricultural College; and W. H. Kerr, Investigator in Market Business Practice, Office of Markets and Rural Organization, United States Department of Agriculture. Pp. 32, pls. 2. Contribution from the Office of Markets and Rural Organization. Nov. 3, 1916. (**Department Bulletin 394.**) Price, 10 cents.

Should be of interest to cooperative stores and to producers and consumers generally.

**Progress Reports of Experiments in Dust Prevention and Road Preservation, 1915.** Pp. 71. Contribution from the Office of Public Roads and Rural Engineering. (Professional Paper.) Nov. 10, 1916. (**Department Bulletin 407.**) Price, 10 cents.

Reports the results from a number of experiments in dust prevention and road preservation conducted by the Office of Public Roads in 1915. The materials used and methods employed in the experiments, the several kinds of roads and varying conditions of traffic, and analyses of materials and cost data are given.

**Value to Farm Families of Food, Fuel, and Use of House.** By W. C. Funk, Scientific Assistant. Pp. 35, fig. 1. Contribution from the Office of Farm Management, Office of the Secretary. (Professional Paper.) Nov. 11, 1916. (**Department Bulletin 410.**) Price, 10 cents.

Gives data secured from nearly 1,000 families, covering the value of all food, fuel, and shelter and showing what part was bought and what part was furnished by the farm.

**The Grape Leaf-Folder.** By J. F. Strauss, Entomological Assistant, Deciduous Fruit Insect Investigations. Pp. 16, pls. 4, figs. 6. Contribution from the Bureau of Entomology. Nov. 9, 1916. (**Department Bulletin 419.**) Price, 5 cents.

Describes life history and habits and suggests methods of control of this insect.

**Labor Requirements of Dairy Farms as Influenced by Milking Machines.** By Harold N. Humphrey, Scientific Assistant. Pp. 17, figs. 3. Contribution from the Office of Farm Management, Office of the Secretary. (Professional Paper.) Nov. 25, 1916. (**Department Bulletin 423.**) Price, 5 cents.

Is of interest to dairymen generally, and especially to those having herds of over 15 head of cows.

**The Cottonwood Borer.** By F. B. Milliken, Scientific Assistant, Truck-Crop and Stored-Product Insect Investigations. Pp. 7, pl. 1, figs. 3. Contribution from the Bureau of Entomology. (Professional Paper.) Nov. 9, 1916. (**Department Bulletin 424.**) Price, 5 cents.

Describes life history and habits of this insect and suggests methods of its control.

**Judging the Dairy Cow as a Subject of Instruction in Secondary Schools.** By H. P. Barrows, Assistant in Agricultural Education, States Relations Service, and H. P. Davis, Dairy Husbandman, Bureau of Animal Industry. Pp. 20, figs. 15. Contribution from the States Relations Service and Bureau of Animal Industry. Nov. 4, 1916. (**Department Bulletin 434.**) Price, 5 cents.

Is intended for the use of teachers of secondary agriculture.

**The Apple Leaf-Sawer.** By B. R. Leach, Scientific Assistant, Deciduous Fruit Insect Investigations. Pp. 16, pl. 1, figs. 6. Contribution from the Bureau of Entomology. Nov. 25, 1916. (**Department Bulletin 435.**) Price, 5 cents.

This bulletin will be found of value to apple growers in the North and Central Atlantic States, the Middle West, and portions of Canada.

**False Blossom of the Cultivated Cranberry.** By C. L. Shear, Pathologist, Fruit-Disease Investigations. Pp. 7, pls. 4, figs. 2. Contribution from the Bureau of Plant Industry. (Professional Paper.) Nov. 25, 1916. (**Department Bulletin 444.**) Price, 5 cents.

Is of interest to plant pathologists and to cranberry growers, especially in the States of Massachusetts, New Jersey, Wisconsin, and the coastal regions of Oregon and Washington.

**Water Penetration in the Gumbo Soils of the Belle Fourche Reclamation Project.** By O. R. Mathews, Assistant, Dry-Land Agriculture Investigations. Pp. 12, figs. 4. Contribution from the Bureau of Plant Industry. Nov. 22, 1916. (**Department Bulletin 447.**) Price, 5 cents.

Of especial interest to farmers and users of irrigation water on this project.

**Relation Between Primary Market Prices and Qualities of Cotton.** By Fred Taylor, Cotton Technologist. Pp. 15. Contribution from the Office of Markets and Rural Organization. Nov. 24, 1916. (**Department Bulletin 457.**) Price, 5 cents.

The survey here described should be of interest to all who are connected with the cotton industry.

## MISCELLANEOUS.

**Annual Report of the Porto Rico Agricultural Experiment Station, 1915.** Pp. 45, pls. 3. Nov. 23, 1916. Price, 30 cents.

**Experiments on the Supposed Deterioration of Varieties of Vegetables in Porto Rico, with Suggestions for Seed Preservation.** By C. F. Kinman, Horticulturist, and T. B. McClelland, Assistant Horticulturist. Pp. 30, figs. 11, Nov. 8, 1916. (**Bulletin 20, Porto Rico Agricultural Experiment Station.**) Price, 10 cents.

**Rules and Regulations of the Secretary of Agriculture under the United States Grain Standards Act of August 11, 1916.** Pp. 54, Nov. 6, 1916. (**Circular 70, Office of the Secretary.**) Price, 5 cents.

## REPORTS.

**Annual Report of the Secretary, 1916.** Pp. 48.

**Annual Report of the Chief of the Division of Accounts and Disbursements, 1916.** Pp. 3.

**Annual Report of the Chief of the Bureau of Animal Industry, 1916.** Pp. 70.

**Annual Report of the Chief of the Bureau of Biological Survey, 1916.** Pp. 16.

**Annual Report of the Chemist, 1916.** Pp. 14.

**Annual Report of the Chief of the Bureau of Crop Estimates, 1916.** Pp. 7.

**Annual Report of the Editor, 1916.** Pp. 20.

**Annual Report of the Entomologist, 1916.** Pp. 24.

**Annual Report of the Chief of the Office of Farm Management, 1916.** Pp. 9.

**Annual Report of the Federal Horticultural Board, 1916.** Pp. 14.

**Annual Report of the Forester, 1916.** Pp. 36.

**Annual Report of the Insecticide and Fungicide Board, 1916.** Pp. 3.

**Annual Report of the Librarian, 1916.** Pp. 12.

**Annual Report of the Chief of the Office of Markets and Rural Organization, 1916.** Pp. 29.

**Annual Report of the Chief of the Bureau of Plant Industry, 1916.** Pp. 18.

**Annual Report of the Director of the Office of Public Roads and Rural Engineering, 1916.** Pp. 16.

**Annual Report of the Chief of the Bureau of Soils, 1916.** Pp. 7.

**Annual Report of the Solicitor, 1916.** Pp. 22.

**Annual Report of the Director of States Relations Service, 1916.** Pp. 31.

**Annual Report of the Chief of the Weather Bureau, 1916.** Pp. 18.

**Note.**—The edition of the above noted reports is limited and none are printed for sale. Requests for them will be filled as long as the supply lasts.

## SERIALS.

**Journal of Agricultural Research.** (**For sale only.**) Vol. 7, No. 6, Nov. 6, 1916. Contents: Freezing-Point Lowering of the Leaf Sap of the Horticultural Types of *Persea americana*. (G—98.) By J. Arthur Harris and Wilson Popenoe.—Grain of the Tobacco Leaf. (G—99.) By Charles S. Ridgway.—Host Plants of *Thielavia basicola*. (Wis.—6.) By James Johnson. Pp. 261—300, pls. 5, figs. 2. Price, 15 cents.

**Same**, Vol. 7, No. 7, Nov. 13, 1916. Contents: Chemical Composition, Digestibility, and Feeding Value of Vegetable-Ivory Meal. (Mass.—2.) By C. L. Beals and J. B. Lindsey.—Rosy Apple Aphis. (K—45.) By A. C. Baker and W. F. Turner. Pp. 301—342, pls. 6. Price, 15 cents.

**Same**, Vol. 7, No. 8, Nov. 20, 1916. Contents: Use of Two Indirect Methods for the Determination of the Hygroscopic Coefficients of Soils. (Nebr.—1.) By F. J. Alway and V. L. Clark.—Correlation Between the Size of Cannon Bone in the Offspring and the Age of the Parents. (III.—5.) By Christian Wreidt.—*Laspeyresia molesta*, an Important New Insect Enemy of the Peach. (K—46.) By A. L. Quaintance and W. B. Wood. Pp. 345—377, pls. 6, figs. 6. Price, 15 cents.

**Same**, Vol. 7, No. 9, Nov. 27, 1916. Contents: Energy Values of Red-Clover Hay and Maize Meal. (Pa.—1.) By Henry Prentiss Armsby, J. August Fries, and Winfred Waite Braman.—Relationship between the Wetting Power and Efficiency of Nicotine-Sulphate and Fish-Oil Soap Spray. (Va.—1.) By Loren B. Smith.—Life History and Poisonous Properties of *Claviceps paspali*. (Miss.—1.) By H. B. Brown.—Effect of Sodium Salts in Water Cultures on the Absorption of Plant Food by Wheat Seedlings. (G—100.) By J. F. Breazeale. Pp. 379—416, pl. 1, figs. 12. Price, 10 cents.

**Note.**—Beginning with Volume 5, The Journal of Agricultural Research will be issued weekly and distributed free *only* to the libraries of agricultural colleges and experiment stations, to large universities, technical schools, and such institutions as make suitable exchanges with the department. *It will not be sent free to individuals.* The Superintendent of Documents will receive subscriptions for this publication, the price being \$3 per year, 52 numbers.

**The Monthly Crop Report.** Vol. 2, No. 11, November, 1916. Pp. 109—120. (**Bureau of Crop Estimates.**)

Contains data relating to agriculture, including estimates of acreage, conditions, yield, prices, and value of crops and live stock. For free distribution.

## SERVICE AND REGULATORY ANNOUNCEMENTS—FOR SALE ONLY.

**REG** These contain *only* information, instructions, and notices governing the enforcement of food and drugs act, meat inspection, 28-hour and quarantine laws, and the various regulations of the department. Issued monthly by certain bureaus. *Free distribution* is limited to persons in the employ of the department, to public officials whose duties render it necessary for them to have such information, to journals especially concerned, and to manufacturers and firms whose business is affected by same. Others desiring copies are respectfully referred to the Superintendent of Documents, Government Printing Office, who has them for sale *only*, at prices noted.

**Bureau of Animal Industry.** **No. 113.** September, 1916. Pp. 77-88. Nov. 6, 1916. Price, 5 cents.

**Bureau of Biological Survey.** **No. 13.** Pp. 4. Nov. 20, 1916. Price, 5 cents.

**Bureau of Chemistry.** **Supplement 20.** [N. J. 4451-4500.] Pp. 719-810. Nov. 13, 1916. Price, 10 cents.

**Federal Horticultural Board.** **No. 32.** September, 1916. Pp. 103-129. Nov. 16, 1916. Price, 5 cents.

**Federal Horticultural Board.** **No. 33.** October, 1916. Pp. 131-140. [Nov. 23, 1916.] Price, 5 cents.

**Office of Markets and Rural Organization.** **No. 14.** Pp. 34. Nov. 20, 1916. Price, 5 cents.

## SOIL SURVEYS.

**REG** All requests for soil surveys are referred to the Bureau of Soils for attention, the distribution of same being controlled by that bureau.

**Field Operations of the Bureau of Soils, 1913 (Fifteenth Report.)** By Milton Whitney, Chief. With accompanying papers by assistants in charge of field parties. Pp. 2438, pls. 43, figs. 62, maps 54 (in case). Price, \$6.65.

For distribution also by Senators, Representatives, and Delegates in Congress.

**Soil Survey of Diekey County, North Dakota.** By T. M. Bushnell, In Charge, E. H. Smies, and W. I. Watkins, of the U. S. Department of Agriculture, and A. C. Anderson, Melvin Thomas, Murray E. Stebbins, R. C. Doneghue, and J. W. Ince, of the North Dakota Agricultural Experiment Station. Pp. 56, fig. 1, map. (From F. O. Soils, 1914.) Price, 15 cents.

## PUBLICATIONS OF THE WEATHER BUREAU.

**REG** Publications of the Weather Bureau are obtainable only from the Chief of the Weather Bureau or the Superintendent of Documents, Government Printing Office, at the prices noted herein.

**Monthly Weather Review.** (For sale only.) Vol. 44, No. 8. August, 1916. Pp. 431-498, charts 9, figs. 19. Price, 25 cents a copy, \$2.50 a year. Payable to the Superintendent of Documents.

Special Articles: Solar and sky radiation measurements during August, 1916. By H. H. Kimball.—High haze over the southwestern United States, July to September, 1916. By H. H. Kimball.—Atmospheric refraction at Mount Hamilton, Cal. By W. G. Reed.—Abnormal propagation of sound waves in the atmosphere. By S. Fujishima.—Auroras observed during August, 1916.—Distribution of precipitation in China during the typhoons of the summer of 1911. By Co-Ching Chu.—Radiation equilibrium and atmospheric radiation. By R. Emden.—Tornado in Utah. By Arthur W. Stevens.—Government safety-first train. By R. H. Finch.—Tower cloud at San Juan, P. R. By F. E. Hartwell.—Extension of U. S. Weather Bureau Service. By C. C. Clark.

**National Weather and Crop Bulletin,** No. 30, October, 1916 reporting temperature, rainfall, and crop conditions throughout the United States. (Issued weekly, on Wednesday, April to October; monthly remainder of year.) Price, 25 cents a year.

JOS. A. ARNOLD,  
*Editor and Chief, Division of Publications.*